SARS-COV-2 PREVALENCE STUDY

DAIDS-ES ID: 38749

A Study by the COVID-19 Prevention Network (CoVPN)

Sponsored by:

United States (US) National Institute of Allergy and Infectious Diseases (NIAID)
US National Institutes of Health (NIH)

Non-IND Study

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Version 2.0 26 May 2021

SARS-COV-2 PREVALENCE STUDY

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PROTOCOL SIGNATURE PAGE

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I will conduct the study in accordance with the provisions of this protocol and all applicable protocol-related documents. I agree to conduct this study in compliance with United States (US) Health and Human Service regulations (45 CFR 46); applicable US Food and Drug Administration regulations; standards of the International Conference on Harmonization Guideline for Good Clinical Practice (E6); Institutional Review Board/Ethics Committee determinations; all applicable in-country, state, and local laws and regulations; and other applicable requirements (e.g., US National Institutes of Health, Division of AIDS) and institutional policies.

I have read and understand the information in this protocol and will ensure that all associates, colleagues, and employees assisting in the conduct of the study are informed about the obligations incurred by their contribution to the study.

Name of Investigator of Record (print name)	
 _	
Signature of Investigator of Record	Date (DD/MONTH/YYYY)

SARS-COV-2 PREVALENCE STUDY

LIST OF ABBREVIATIONS AND ACRONYMS

Ab(s) Antibody/Antibodies

ACTG AIDS Clinical Trials Group

ADA Antidrug antibodies AE(s) Adverse Event(s)

ARDS Acute Respiratory Distress Syndrome

CDC (United States) Center for Disease Control and Prevention

CFR Code of Federal Regulations
COVID-19 CoVPN COVID-19 Prevention Network

CRMS (NIAID) Clinical Research Management System

CRPMC (NIAID) Clinical Research Products Management Center

CRF(s) Case Report Form(s)
DAIDS Division of AIDS

DHHS US Department of Health and Human Services

EUA Emergency Use Authorization

FDA (United States) Food and Drug Administration

HPTN HIV Prevention Trials Network HVTN HIV Vaccine Trials Network ICF(s) Informed consent form(s)

ICH International Council for Harmonisation

IDCRC Infectious Diseases Clinical Research Consortium

IMPAACT International Maternal Pediatric Adolescent AIDS Clinical Trials Group

IoR Investigator of Record

IRB(s) Institutional Review Board(s)
LAR Legally Authorized Representative

LC Laboratory Center

LOC Leadership and Operations Center mAb(s) Monoclonal Antibody/Antibodies

MOE margin of error

NIAID (United States) National Institute of Allergy and Infectious Diseases

NIH (United States) National Institutes of Health OHRP Office of Human Research Protections

PP per-protocol

PRO (DAIDS) Protocol Registration Office RSC (DAIDS) Regulatory Support Center

SAE(s) Serious Adverse Event(s) SAP Statistical Analysis Plan

SDMC Statistical and Data Management Center SARS Severe Acute Respiratory Syndrome

SARS-CoV-2 Severe Acute Respiratory Syndrome Coronavirus 2

sIRB single IRB

SOE Schedule of Events

SSP Study-Specific Procedures manual

TLS Time-location Sampling

US United States

SARS-COV-2 PREVALENCE STUDY

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SARS-COV-2 PREVALENCE STUDY

SCHEMA

Design:

Cross-sectional surveys of (1) adults residing in senior living facilities and attending outpatient healthcare facilities, and (2) the general population in each selected research site community.

Population:

- 1) Adults residing in senior living facilities (nursing homes, assisted or independent living facilities) and attending outpatient healthcare facilities in neighborhoods of selected research sites
- 2) Adults and children (> 2 months of age) in neighborhoods of selected research sites

Study Size:

For each research site, up to 3,920 individuals will be enrolled from one, two, or all three of the following populations (must include at least community venues):

- 1) senior living facilities (nursing homes, assisted or independent living facilities; n = 500)
- 2) outpatient healthcare facilities (n = 500)
- 3) community venues distributed across four age categories (0-17, 18-39, 40-59, 60+ years) (n = 730 per stratum or 2920)

Total sample size = $3,920 \times 10^{-2} \times 10^{-2$

Study Duration:

Approximately sixteen (16) months for overall project. Two (2) months for protocol development and institutional review board (IRB) approval, followed by:

- 1) Facility-based surveys: 12 months (3 months for site preparation and initiation, 3 months for enrollment/sample collection, 4 months for shipping and laboratory testing*, 2 months for close-out), concurrent with
- 2) Time-location sampling (TLS) surveys: 14 months (3 months for site preparation and initiation, 6 months for enrollment/sample collection, 6 months for shipping and laboratory testing*, 2 months for close-out)

Study Location:

Catchment areas surrounding US-based Clinical Research Sites (CRSs) of the: HIV Prevention Trials Network (HPTN), HIV Vaccine Trials Network (HVTN), Infectious Diseases Clinical Research Consortium (IDCRC), International Maternal Pediatric Adolescent AIDS Clinical Trials Group (IMPAACT), and the AIDS Clinical Trials Group (ACTG); to be specified in the Site Announcement Memo

Study Methods:

Blood collection for SARS-CoV-2 antibody testing and characterization of the serologic response to SARS-CoV-2 infection; nasal mid-turbinate swab collection for SARS-CoV-2 RNA testing; collection of saliva in a subset of participants to evaluate the performance of diagnostic SARS-CoV-2 assays using these matrices; administration of tablet-based survey. Medical records abstraction for senior living facility participants who are unable to respond to the study survey.

^{*}Some activities will be concurrent with enrollment

Primary Objective:

To estimate the prevalence of SARS-CoV-2 IgG seropositivity among individuals in communities surrounding selected NIAID clinical research sites

Secondary Objectives:

- 1) To estimate prevalence of SARS-CoV-2 infection based on results of SARS-CoV-2 RNA testing
- 2) To estimate prevalence of SARS-CoV-2 infection by presence versus absence of symptoms consistent with COVID-19
- 3) To estimate seroprevalence of SARS-CoV-2 among:
 - a. Those without past or current symptoms consistent with COVID-19
 - b. Those with no prior positive SARS-CoV-2 testing, but who report close contact with confirmed or presumed cases
 - c. Those with history of co-morbid medical conditions
- 4) To assess association between demographic, clinical and social factors with SARS-CoV-2 infection and seroprevalence
- 5) To estimate potential size of populations for referral to COVID-19 prevention and treatment studies
- 6) To assess knowledge, attitudes, and behavior about SARS-CoV-2 and COVID-19
- 7) To assess performance characteristics of PCR-based and serologic SARS-CoV-2 tests using saliva samples

Exploratory Objectives:

- 1) To model epidemiologic impact over time of COVID-19 in the study communities, including modeled incidence and prevalence of COVID-19.
- 2) To conduct laboratory testing in a subset of participants to characterize SARS-CoV-2 viruses and the host response to SARS-CoV-2 infection; this may include testing for SARS-CoV-2 IgM antibodies. This testing may also include phylogenetic analysis of SARS-CoV-2 and co-infections with other viruses, including viruses that impact the specificity of SARS-CoV-2 serologic assays.

1.0 INTRODUCTION

1.1 Background and Rationale

Currently, the United States (US) has far more confirmed COVID-19 cases than any other country. The US epidemic is remarkably heterogeneous, with many cities and communities experiencing a disproportionately high disease burden and mortality. For example, at present, Minneapolis, Houston, Atlanta, and Durham NC, are projected to bear the brunt of the US epidemic and in the future, other communities may see an increase in the number of COVID-19 cases.

There is an urgent need to address the COVID-19 pandemic in a multipronged, expeditious manner to identify effective interventions for COVID-19 treatment and prevention. The National Institute of Allergy and Infectious Diseases (NIAID) has therefore mobilized its major research networks under the banner of the COVID-19 Prevention Network (CoVPN) to work together in the rapid evaluation of COVID-19 treatment and prevention strategies. This approach leverages the well-established infrastructure, expertise, and on-going partnership of these networks with the resources of the NIH and developers of vaccines, monoclonal antibodies, drugs, and other potential interventions for COVID-19 treatment and prevention. It also leverages the multidisciplinary expertise of investigators and staff in the networks, including clinical trial design and implementation, laboratory, and statistical expertise. In addition, the networks have research sites that allow for rapid enrollment of participants at traditional and non-traditional venues in the US and globally. The engagement of research sites from multiple NIH networks, including the HPTN, HVTN, ACTG and IMPAACT and the Infectious Diseases Clinical Research Consortium (IDCRC), will accelerate recruitment, diversify the trial cohorts, and build capacity for the conduct of future COVID-19 treatment and prevention studies. In this protocol, the terms "clinical research site (CRS)" and "research site" and "site" refer to clinical research sites from selected NIAID networks and "community" refers to the geographic area surrounding each CRS.

The COVID-19 pandemic is evolving, with diverse and dynamic impacts in different regions and populations in the US Over the coming months and years, it is likely that different communities will experience the epidemic to varying extents, with resurgence in other communities. The beginning of the US epidemic was marked by an outbreak at a nursing home near Seattle, Washington (1) and nursing homes in many other states have had similarly tragic experiences with extremely high incidence and mortality rates (2). The nursing home outbreaks reflect the observation, now noted in multiple settings (2), that COVID-19 is more likely to present as a severe infection among those over the age of 65 and those with medical co-morbidities (3) and mortality rates are approximately ten times higher for these groups, even among those not living in a skilled nursing facility. These morbidity and mortality patterns among older individuals with medical conditions underscore the importance of treatment and prevention interventions tailored to this population. Accurate and detailed estimates of SARS-CoV-2 seroprevalence and COVID-19 in a rigorously sampled and geographically broad population will inform the development of these interventions.

The epidemic has also been marked by harsh disparities in COVID-19 rates and other health outcomes among African American and Latino communities who have substantially higher attack rates and higher mortality compared with any other racial or ethnic group (4) across the US The communities surrounding several NIAID CRSs have suffered from not only longstanding racial inequalities, but also socioeconomic disparities in housing and employment, as well as varied access to health and other essential services. These populations also have a high prevalence of co-morbidities associated with higher incidence of COVID-19 (5-8), more severe manifestations of COVID-19 disease (9-11), higher mortality from COVID-19 (11), and have poorer health outcomes from a variety of illnesses overall (12). As with the observations among the elderly, these racial and ethnic factors all compel the need

for the systematic collection of COVID-19-related data from populations at high risk for and highly impacted by COVID-19 and from the general population in their communities to enable the successful design and conduct of COVID-19 targeted prevention and treatment studies and provision of access to these populations of promising prevention and treatment interventions.

The proposed research will provide comprehensive information on communities impacted by COVID-19 beyond surveillance studies currently in the field (see Appendix IV for summary of existing studies). It will directly contribute to preparedness for SARS-CoV-2 vaccine and other COVID-19 prevention studies by determining the prevalence of SARS-CoV-2 infection and seroprevalence among samples of individuals of different ages who are recruited from communities where NIAID CRSs are situated. All prevalence estimates will be weighted for study design, non-response and poststratification population projections in order to generate estimates that are representative of the NIAID CRS communities. This research will determine the extent to which children and adults in these areas have SARS-CoV-2 infection or evidence of prior SARS-CoV-2 infection (based on results of antibody tests, self-report, and medical records). Additionally, data captured through questionnaires about participants' household members with COVID-like illness and deaths, combined with serologic data from participants, may also provide information about transmission dynamics within households. Questionnaire data will inform estimates of the percent of individuals of different age groups, including children, who may have had an asymptomatic COVID-19 infection. The frequency of infection among children and whether infected children play an important role in community transmission is poorly understood (13). The study will also provide estimates of the association of SARS-CoV-2 seroprevalence with medical co-morbidities that have been associated with more severe disease outcomes and will also identify demographic and social risk factors associated with infection (10). Finally, this research will provide important information about SARS-CoV-2 transmission, COVID-19 disease, attitudes about and uptake of containment and mitigation measures, racial and ethnic health disparities, varied access to testing and public health resources by key demographic indicators, prospects for new prevention and treatment strategies, and be used to inform mathematical models of disease progression and projection of future COVID-19 risk.

Other SARS-CoV-2 studies that are ongoing in the US use different sampling approaches and/or assess different populations (see Appendix IV). For example, the NIH's ongoing "SARS-CoV-2 Pandemic Serosurvey and Blood Sampling," (NCT04334954) will estimate the number of adults over the age of 18 years with SARS-CoV-2 antibody among those who have not had confirmed COVID-19 or known exposure to COVID-19. The study uses non-probability sampling to assemble a cohort of 15,000 adults from three locations (Bethesda MD, Birmingham AL and Pittsburgh PA). The ongoing study has a longitudinal component as participants can re-enroll up to four times if more than 30 days have elapsed since their last enrollment.

In contrast, the current study uses time-location sampling to assess cohorts that are representative of the communities near NIAID research sites across the US; includes young children and adolescents as well as adults; includes a detailed assessment of older adults with medical co-morbidities, including those residing in skilled nursing facilities; estimates the number and proportion with active infection as well as both symptomatic and asymptomatic prior infection; and will provide a more detailed picture of the racial and ethnic profile of the COVID epidemic in the US.

In summary, this study will provide critically important information on the prevalence of current and prior SARS-CoV-2 infections in communities in the US where NIAID research sites are situated. It will assess the impact of COVID-19 on the communities, model the potential impact of different prevention interventions, and set the foundation for COVID-19 prevention and treatment trials in these communities. It will also provide critical information to guide site section and the allocation of numbers of participants for future prevention and treatment studies and will provide valuable samples for key laboratory assessments related to SARS-CoV-2 infection and the COVID-19 epidemic.

1.2 Study Design

Sites will be selected from existing NIAID CRSs. For most metropolitan areas, one CRS will be selected with consideration given to the population they serve. For larger metropolitan areas (e.g., New York, Chicago, Los Angeles), two or more CRSs may be selected to gain full representation of the region. Adjustments may be made to the selected CRSs as the dynamics of the pandemic shift.

The study will begin with community consultations with existing site community advisory boards and key stakeholders, including relevant experts from local health departments, local healthcare and social service providers, and caregivers for elderly and chronically ill populations. These consultations will help identify specific venues, key community attributes, appropriate social venues, and times and days when venues are likely to be well populated. The consultations will also include discussions about how best to report results of SARS-CoV-2 RNA testing, to local health departments, as required by health regulations. Advice will be sought from the community advisory boards to help develop communication and social mobilization plans that ensure high participation rates.

The study is observational in design with a single study visit. Recruitment, enrollment, and data collection will take place using two strategies: facility-based surveys of senior living facilities and time-location sampling (TLS) surveys of outpatient clinics and community venues. Facility-based surveys will begin with each research site creating a list of nearby senior living facilities that are interested in participating in the study. A census of all participating senior living facilities will be conducted to recruit up to 500 individuals per research site. Consent will be obtained from legal guardians for participants who are not able to provide consent. Medical abstraction will be performed for these participants in lieu of administering the study questionnaire.

Adults attending outpatient medical clinics and members of the general population attending community venues will be recruited through TLS. TLS is a well-established study methodology that uses ethnographically-informed mapping of social spaces to create a "clinic-time-day universe" or "venue-time-day universe" of commercial establishments, social service providers, schools, places of worship, parks, and transit hubs from which a given population can be systematically approached and surveyed (14). The approach is appropriate to reach a representative sample of individuals participating in social activities and interactions in the study communities.

Adults who were recruited at a selected clinic or venue, have the capacity for consent and are willing and able to answer a brief survey and provide a blood sample and nasal mid-turbinate swab, will be included in the study. Children aged 2 months - 17 years will be included, with the consent of their parent or legal guardian and their assent from youth 7 – 17 years of age; the parent/guardian will complete the questionnaire for those under age 10 years and will assist those ages 11-15. These inclusion criteria allow for sampling of all populations impacted by the COVID-19 pandemic, including residents with chronic diseases such as obesity, hypertension, and diabetes, which have been shown to increase severity and mortality in COVID-19 patients. Data collection from parents/guardians about their children is also critical for understanding the prevalence of COVID-19 in younger patients, to understand the role children of different ages may play in household and community transmission dynamics and to learn about factors that may put some children at increased risk.

2.0 STUDY OBJECTIVES AND ENDPOINTS

2.1 Primary Objective and Endpoint

Primary Objective	Primary Endpoint		
To estimate the prevalence of SARS-CoV-2 IgG seropositivity among individuals in communities surrounding selected NIAID clinical research sites	Proportion of individuals who have SARS-CoV-2 IgG antibodies, evaluated overall and by age strata, in the following populations: 1) Adults 18 and older residing in senior living facilities 2) Adults 18 and older attending outpatient healthcare clinics, and 3) Individuals in communities of selected research sites in the following age categories a. 2 months – 17years old b. 18-39 years old c. 40-59 years old d. 60 years and older		

2.2 Secondary Objectives and Endpoints

Secondary Objectives	Secondary Endpoints			
1) To estimate prevalence of SARS-CoV-2 infection based on results of SARS-CoV-2 RNA testing	Proportion of individuals with SARS-CoV-2 infection (based on SARS-CoV-2 RNA testing)			
2) To estimate prevalence of SARS-CoV-2 infection by presence versus absence of symptoms consistent with COVID-19	Proportion of individuals with SARS-CoV-2 infection (based on SARS-CoV-2 RNA testing) who report lack of symptoms versus presence of symptoms consistent with COVID-19			
3) To estimate seroprevalence of SARS-CoV-2 among:	Proportion of individuals with SARS-CoV-2 IgG antibodies who report:			
 a) Those without past or current symptoms consistent with COVID-19, b) Those with no prior positive SARS-CoV-2 testing, but who report close contact with confirmed or presumed cases, and c) Those with history of co-morbid medical conditions 	 a) Prior confirmed or presumed COVID-19 vs. those who report never having symptoms, b) No prior COVID-19 but who report close contact with a COVID-19 case (as defined by the US Centers for Disease Control and Prevention), and c) Co-morbid medical conditions such as obesity, hypertension and diabetes 			

Secondary Objectives	Secondary Endpoints		
4) To assess association between demographic, clinical and social factors with SARS-CoV-2 infection and seroprevalence	Socioeconomic, demographic and clinical correlates of COVID-19 and/or SARS-CoV-2 seroprevalence with particular interest in racial and ethnic health disparities		
5) To estimate potential size of populations for referral to COVID-19 prevention and treatment studies	 Extrapolated population sizes of a) Those with active COVID-19, b) Those who have serologic evidence of recent and/or past SARS-CoV-2 infection, and c) Those who have negative RNA and serologic SARS-CoV-2 tests 		
6) To assess knowledge, attitudes, and behavior about SARS-CoV-2 and COVID-19	Knowledge and attitudes about SARS-CoV-2 and COVID-19, and uptake of public health interventions including shelter in place orders social distancing, and mask use		
7) To assess performance characteristics of PCR-based and serologic SARS-CoV-2 tests using saliva	 a) Estimates of sensitivity, specificity, and concordance of SARS-CoV-assays using saliva samples, compared to nasal swab and serum samples b) Estimates of sensitivity and specificity of SARS-CoV-2 IgG serologic assays using saliva samples, compared to serum samples 		

2.3 Exploratory Objectives

Exploratory Objective 1:

• To model epidemiologic impact over time of COVID-19 in the study communities, including modeled incidence and prevalence of COVID-19.

Exploratory Objective 2:

 To conduct laboratory testing in a subset of participants to characterize SARS-CoV-2 viruses and the host response to SARS-CoV-2 infection, which may include detection of anti-SARS-CoV-2 IgM antibodies. This testing may also include phylogenetic analysis of SARS-CoV-2 and co-infections with other viruses, including viruses that impact the specificity of SARS-CoV-2 serologic assays.

3.0 STUDY POPULATION

The study population will consist of adults residing in senior living facilities or attending outpatient healthcare facilities, and adults and children in select neighborhoods of research site communities.

Study staff will be in full personal protective equipment to minimize transmission risks and mitigate access restrictions. Masks will be offered to all participants who are not wearing them. Tablets, seating areas, and other surfaces will be sanitized with appropriate disinfectants between study participants. Each site will be required to document risk mitigation procedures in site standard operating procedures or other procedures manuals.

3.1 Inclusion Criteria

- **3.1.1** Adults residing in senior living facilities or attending outpatient healthcare facilities
 - **3.1.1.1** At least 18 years of age
 - **3.1.1.2** Willing and able to provide informed consent or consent has been provided by legal representative (for those with mental incapacity in senior living facilities)
 - **3.1.1.3** Recruited from a selected facility
- **3.1.2** Adults and children from select neighborhoods of research site communities
 - **3.1.2.1** Adults and children > 2 months of age
 - **3.1.2.2** For individuals < 18 years old, a guardian must be present (in person or by phone for those 15 17 years old)
 - **3.1.2.3** Willing and able to provide consent (or assent for individuals 7-17 years old, parent/guardian will provide consent for all minors)
 - **3.1.2.4** Recruited from a selected venue

3.2 Exclusion Criteria

- **3.2.1** Previous enrollment in this study, either from the same or another CRS community.
- **3.2.2** Any condition that, in the opinion of the study staff, would make participation in the study unsafe, complicate interpretation of study outcome data, or otherwise interfere with achieving the study objectives.
- Note COVID-19 vaccination is not exclusionary

3.3 Recruitment Process

Each CRS will be responsible for enrolling up to 3,920 individuals. This will include a combination of community venues, healthcare facilities, and senior living facility residents. Most sites will enroll from all three populations whereas others may enroll from one or two, depending on capacity, however all sites must enroll participants from the community venues. Each study site will tailor community engagement and recruitment strategies to local circumstances and strategies using the recruitment guidelines outlined below and the Study Specific Procedures (SSP) Manual in order to maximize enrollment. Sites will be expected to work closely with community-based organizations or other appropriate groups with ties to the study communities.

3.3.1 Sampling Design and Recruitment at Community Venues

The initial sampling "universe" – the list of target venues in the catchment area of the CRS – is comprised of venues routinely frequented by residents of the community. A venue could be retail businesses (e.g., laundromats, grocery stores), cafes and restaurants, health clubs, social service providers, schools, places of worship, transit hubs, parks, or beaches. Once this list (the "universe") of potential venues is created, CRS staff will determine the suitability of each venue. A venue may not be suitable for sampling if any of the following are true:

- It would be impossible logistically to recruit, interview and conduct study procedures.
- Venue owner(s) refuse to allow the project staff access to venue attendees.

Project staff will assess venue suitability by observing venues or informally talking to residents of the community and venue owners/managers. Time-location sampling will be used to select individuals who attend the population of suitable community venues in the catchment area during the overlapping operating hours of both the community venues and the CRS staff. For each catchment area, we first create a list of all suitable community venues and times that each venue is available in a given calendar period, e.g. week. Sampling will be performed in two stages. The first stage selects a stratified random sample of Venue Day Times (VDTs; approximate 4-hour time block that is available for recruitment at a specified venue). The second stage samples individuals from sampled VDTs (details outlined in the SSP Manual).

3.3.2 Sampling Design and Recruitment at Outpatient Clinics

Time-location sampling will be used to select individuals who attend suitable (where recruitment is feasible, and management is amenable) outpatient medical clinics in the catchment area during the overlapping operating hours of both the clinics and the CRS staff. Sampling will be performed in two stages. The first stage randomly selects Clinic Day Times (CDTs; approximate 4-hour time block that is available for recruitment at a specified clinic). The second stage samples individuals attending the clinic during the selected CDT (details outlined in the SSP Manual).

3.3.3 Sampling Design and Recruitment at Senior Living Facilities

Sample and recruitment will be undertaken using a convenience sample of n=500 individuals from the total population of individuals residing in interested and consenting senior living facilities (details outlined in the SSP Manual).

3.4 Participant Retention

Study participation includes a single study visit either immediately following recruitment or at a later, scheduled date. In extenuating circumstances where a participant is unable to complete all procedures during one visit, a split visit can occur. Details are outlined in Section 4 of the SSP Manual.

3.5 Participant Withdrawal

Participants may voluntarily withdraw from the study for any reason at any point during the study visit. The Investigator of Record (IoR) or designee may also withdraw participants from the study in order to protect their safety and/or if they are unwilling or unable to comply with required study procedures. Participants who withdraw from the study prior to completing the study procedures will be replaced. Study staff will record the reason(s) for all withdrawals from the study in participants' study records.

3.6 Community Definition

The target venues for recruitment, enrollment, and data collection will be within the surrounding zip codes of the CRS. The protocol team will work with CRSs to select enough zip codes to include a specified number of residents that will allow for rapid enrollment of a representative sampling of the community. Details of the approach and documentation of the final selections will be documented in the SSP Manual.

4.0 STUDY PROCEDURES

An overview of the study visits and procedures is presented in Appendix I. Presented below is additional information on specific study procedures. Additional detailed instructions to guide and standardize all study procedures across sites will be provided in the SSP Manual. Study visits will either take place at the venue, in a location identified by study staff which assures adequate privacy and confidentiality, or at the CRS if an individual is interested in participating but unable to complete the study procedures at that moment. For visits occurring at community venues, tents or privacy screens will be erected to allow for privacy during visit procedures.

Participants will be offered reimbursement for their time and effort via gift cards or other locally developed methods. Measures will be put into place to ensure staff safety in the field, such as gift card activation prior to use.

4.1 Informed Consent

Independent informed consent will be obtained using encrypted electronic tablets from each participant before any study procedures are initiated. If electronic consent is not available, consent can be captured on paper. For more on informed consent, see Section 8.2.

4.1.1 Recruitment and Screening

Study field teams will consist of recruiters and research assistants, trained in study procedures and specimen collection, who will conduct data and specimen collection at specified venues and times. Recruiters will approach individuals with a brief explanation of the study and invite them to be screened for eligibility. A verbal consent will be administered and then staff will ask their age, if they are already enrolled in this study, and if they are interested in participating.

Individuals will be informed that, in addition to receiving their test results, per local health codes, a positive SARS-CoV-2 diagnostic test result will be transmitted in a confidential manner to local health authorities.

4.1.2 Protocol-Specific Consent Form

Recruiters will obtain informed consent using encrypted electronic tablets; participants will receive a paper copy of the consent form. A sample protocol-specific consent form is located in Appendix II: Sample Informed Consent Form. (Paper consent may be collected if electronic consent is not available.)

Each CRS is responsible for developing a protocol-specific consent form(s) for local use, based on the sample protocol-specific consent forms in Appendix II: Sample Informed Consent Form. The consent form(s) must be developed in accordance with requirements of the following:

- The single IRB (sIRB)
- CRS's institution, and
- Elements of informed consent as described in Title 45, CFR Part 46 and Title 21 CFR, Part 50, and in ICH E6 (R2), Good Clinical Practice: Consolidated Guidance 4.8.

Study sites are strongly encouraged to have their local Community, Resident or Staff Advisory Board(s) (as appropriate) review their site-specific consent forms. This review should include, but should not be limited to, issues of cultural competence, local language considerations, and the level of understandability.

The sample informed consent form(s) (ICF[s]) include instructions for developing specific content.

4.2 Enrollment

The point of enrollment into this study is when the participant signs the informed consent form.

4.3 Questionnaire Administration

The questionnaire will be administered to each consenting participant (or to the parent of participants up to 9 years of age) using encrypted tablet computers or paper forms. Data collected will include basic demographic, socioeconomic, geographic, clinical, and household SARS-CoV-2 exposure/infection history indicators. (The list of COVID symptoms is included as part of the questionnaire.) A brief knowledge and attitudes questionnaire will be administered to participants aged 10 years or older. Individuals will be asked questions related to personal and community impact from COVID-19, such as loss of employment or housing, and access to basic resources and healthcare. The questionnaire will be tailored for age appropriateness.

4.4 Phlebotomy

A small volume of venous blood \sim 6 mL for participants aged 2-6 years, \sim 10 mL for participants aged > 6 years or fingerstick to yield 1mL of blood when staff have unsuccessful attempts at venous puncture (number of failed attempts defined in the SSP)), and \sim 500uL of blood via heel or finger stick (heel stick recommended for participants 2-6 months and finger stick for participants 6 months to 2 years old) will be collected from each participant by trained study staff and labeled with a study ID. Specimens will be kept in a temperature-controlled container at the venue until they are transported to a local laboratory.

Dried blood spots, and plasma or serum aliquots will be prepared at the processing laboratory and stored. Stored samples will be used for serologic testing and will also be stored for specialized SARS-CoV-2 testing. Serologic testing will be performed retrospectively at the LC and/or other centralized network laboratories. The results of these tests will not be returned to study sites or participants.

4.5 Nasal Mid-Turbinate Swab Sample Collection

SARS-CoV-2 RNA testing will be performed on nasal mid-turbinate swab samples for analysis at local laboratories using a testing platform approved by the LC. Procedures for sample collection and processing will be described in the SSP Manual.

4.6 Saliva Substudy

In a subset (approximately 1000) of participants, an additional nasal mid-turbinate swab and saliva will be collected as described in the SSP manual.

4.7 SARS-CoV-2 Counseling

All study participants will receive counseling messages consistent with the US Center for Disease Control and Prevention (CDC) and local public health authorities. These messages will include instructions on use of masks and how to isolate from others, duration of isolation, how to monitor for worsening of symptoms, and how to connect to social services as needed.

4.8 SARS-CoV-2 Results Reporting

Participants will be provided with instructions to retrieve the results of their SARS-CoV-2 RNA testing; those with positive test results will receive counseling about isolation and referral to care and will be reminded of plans to inform local health authorities for follow-up and contact tracing. Positive RNA results will be reported to local health authorities as per local health regulations. Serology results are for research purposes only and will not be returned to participants.

4.9 Medical Records Abstraction for Senior Living Facility Participants

Medical record abstraction will occur for participants who are residents in senior living facilities and who have been consented by their legally authorized representative because of diminished cognitive capacity. Questionnaire domains will include history of chronic illnesses (e.g. diabetes, hypertension, asthma, etc.), smoking history, and prior SARS-CoV-2 diagnosis and will be comparable (when possible) to domains in the questionnaire.

5.0 SAFETY MONITORING AND ADVERSE EVENT REPORTING

As this is an observational study, standard adverse event (AE) reporting will not be undertaken. The study team will monitor for and track serious adverse events (SAEs) related to study procedures and/or to participation in the study. Such events that are unexpected will be reported to the NIAID Medical Officer at the same time as they are reported to IRBs according to pre-established written procedures, as required by 45 CFR 46. This information will not be recorded on case report forms (CRFs) or entered into the study database. Data on social harms will be collected as part of the overall assessment of participant safety.

6.0 STATISTICAL CONSIDERATIONS

6.1 Review of Study Design

This is a cross-sectional study of individuals residing within the vicinity of selected research sites in the United States who are (i) residing in senior living facilities, (ii) visiting outpatient clinics at given times; and (iii) members of the general population who attend any of the listed community venues at given times. The study aims to estimate prevalence of SARS-CoV-2 infection and IgG seropositivity separately in each of these populations (sampling strategies described above). Given that the three primary endpoints and their respective samples are independent, sites may recruit from one, two, or all three population groups, depending on site capacity (sites must enroll from at least the community venues). Consenting and assenting participants who satisfy the inclusion and exclusion criteria described in Section 3.0, will answer a brief survey and provide a blood sample and nasal midturbinate swab(s).

6.2 Sample Size

The sample size is calculated for the primary objective, namely, to estimate the seroprevalence of SARS-CoV-2 among individuals and communities where potential COVID-19 vaccine or other prevention interventions studies may be prioritized.

A sample of up to 500 senior living facility residents will be enrolled (described above).

A separate sample of approximately 500 adults from outpatient clinical facilities will be selected according to a TLS design implemented as a two-stage random sample (described above).

The sample size for the TLS sampling was determined based on the minimum sample size needed to achieve prespecified margin of error (MOE). This framework sets a tolerance, also called the margin of error (MOE) for how close we would like the estimated prevalence \hat{p} to be from the true population prevalence p. Denoting the MOE by e, this means

$$Pr(|\hat{p} - p| \le e) = 1 - \alpha.$$

Assuming \hat{p} can be treated as normally distributed, this statement is equivalent to setting the half-width of a $100(1-\alpha)$ / two-sided confidence interval to $e = z_{1-\alpha/2}\sqrt{V(\hat{p})}$ which results in a sample size of

$$n \approx z_{1-\alpha/2}^2 \frac{p(1-p)}{e^2}$$

Table 1 shows the sample sizes needed to achieve required sample sizes with +/-5% and +/-2.5% margin of error on estimated prevalence for a range of assumed prevalence of SARS-CoV-2 antibodies for simple random samples of infinite population size.

Table 1. Sample Size requirement (per strata) to achieve +/- 5% and +/- 2.5% MOE for a range of assumed seroprevalence

SARS prev	0.02	0.05	0.1	0.15	0.2	0.25
+/- 5% MOE	30	73	138	196	246	288
+/- 2.5% MOE	120	292	553	784	983	1152

Table 2. Sample Size requirement (per strata) to achieve +/- 5% and +/- 2.5% MOE for a range of assumed seroprevalence after using a design effect of 2.5.

SARS prev	0.02	0.05	0.1	0.15	0.2	0.25
+/- 5% MOE	75	182	346	490	615	720
+/- 2.5% MOE	301	730	1383	1959	2459	2881

To estimate the prevalence of infection and seropositivity in each of four age strata (2 months-17, 18-39, 40-59, 60+ years), we assumed the seroprevalence of SARS-CoV-2 may vary from 2.5% to 25%, and specified a margin of error (MOE) of 2.5% for prevalence below 5% and 5% MOE for prevalence between 10 and 25%, and assumed a design effect of 2.5 to account for clustering within social

networks of a venue. These values are shaded in Table 2 above and yield a maximum sample size of 730 per stratum.

6.3 Statistical Analyses

This section briefly describes the final study analyses. Detailed technical specifications of the statistical analyses will be described in a separate Statistical Analysis Plan (SAP).

All statistical analyses will account for the sample design to create the base sampling weights. The sampling weights will be further adjusted for nonresponse and post-stratified using demographic information such as age, sec, race/ethnicity, education, and income. County-level estimates from the census bureau will be used for raking and post-stratification. We will estimate prevalence and calculate 95% confidence intervals of SARS-CoV-2 infection and IgG seropositivity for each target population separately, i.e. among community residents in each of the age groups (2 months-17, 18-39, 40-59, 60+ years); among patients attending the outpatient clinics; and among senior living facility residents.

6.3.1 Primary Analyses

Design-based estimates using the survey weights will be used to estimate the overall prevalence of SARS-CoV-2 IgG seropositivity among individuals in each of the three target populations. Survey weights will be used to reflect the sampling design for each target population and post-stratified to census data on known demographic variables. Variance of the design-based estimates will be estimated using linearization-based and Jackknife methods. The design-based estimates and corresponding standard errors will be used to construct 95% confidence intervals.

Prevalence estimates in each age group will be estimated using domain estimates implemented as ratio estimates in each subgroup.

Sensitivity analysis may be considered to adjust for test sensitivity and specificity if prevalence is estimated to be lower than 5%.

6.3.2 Secondary Analyses

Prevalence estimates in each age group will be estimated using domain estimates implemented as ratio estimates in each subgroup (15) for Secondary Objectives 1-3 in Section 2.2.

Logistic regression using survey weights will be used to infer associations between the hypothesized socioeconomic, demographic and clinical predictors of SARS-CoV-2 infection and seroprevalence described in Secondary Objective 4. Logistic regression using survey weights will also be used to infer associations between knowledge, attitudes, and behavior about SARS-CoV-2 and COVID-19 described in Secondary Objective 6 with uptake of public health interventions including shelter in place orders, social distancing, and mask use.

Design-based survey estimates will also be used for Secondary Objective 5 to estimate the size of the populations with potential for referral to COVID-19 prevention and treatment trials. Performance characteristics of the serological and antibody tests will be specific to the substudy and will not account for the sampling design.

7.0 LABORATORY SPECIMENS AND BIOHAZARD CONTAINMENT

7.1 Specimen Collection

Specimens collected during study visits are specified in Appendix I: Schedule of Evaluation and Procedures, and include:

- 1) Up to 10 mL blood (500 uL for participants 2 months to 2 years, ~6 mL for participants aged 2-6 years, ~10 mL for participants aged >6 years, or 1 mL from fingerstick after unsuccessful venous puncture attempts))
- 2) Note: Dried blood spots will be prepared at the local laboratory for participants less than 2 years of age or for participants >2 years with unsuccessful venous puncture attempts
- 3) Nasal mid-turbinate swabs
- 4) Saliva and additional nasal swab samples (subset of participants in saliva substudy)

Specimen collection procedures are described in the SSP Manual. Nasal and saliva sample collection are described in the clinical section of the SSP Manual.

7.2 CRS Lab Procedures

The SSP Manual provides further guidelines for operational issues concerning the clinical and processing laboratories. These documents include guidelines for specimen collection, special considerations for phlebotomy, specimen labeling, whole blood processing, SARS-CoV-2 screening/RNA testing, and general screening.

All assays described below with the exception of SARS-CoV-2 RNA testing done at local clinical reference laboratories will be performed for research use only. Individual participant level results from these assays will not be made available to study sites or participants.

7.3 Endpoint Assays

For SARS-CoV-2 infection, RNA testing will be performed using nasal mid-turbinate swabs at local or clinical reference laboratories using a laboratory platform approved by the LC.

For SARS-CoV-2 seroprevalence, SARS-CoV-2 specific IgG antibodies will be evaluated in centralized laboratories approved by the LC using assays that are Food and Drug Administration (FDA)-approved or have Emergency Use Authorization (EUA) from the US FDA. The SARS-CoV-2 specific IgG antibody assay employed will target the viral nucleocapsid protein.

7.4 Exploratory Studies

Samples may also be used to conduct specialized laboratory testing. This testing will be performed using samples from a subset of study participants. This testing may include characterization of SARS-CoV-2 viruses; phylogenetic analysis; detection of anti-SARS-CoV-2 IgM antibodies; evaluation of CoV-2 assays using alternate sample types; characterization of the host response to SARS-CoV-2 infection; viral neutralization assays; and the prevalence of co-infections with other viruses, including viruses that may impact the specificity of COVID-19 serologic assays.

Samples may also be used for other testing and research related to furthering the understanding of SARS-CoV-2 immunology and virology, including, but not limited to, antibody-mediated anti-viral activities, and antibody dependent enhancement; monoclonal antibodies and antibody-mediated

prevention; or vaccines. In addition, samples may be used to perform additional assays to support standardization and validation of existing or newly-developed test methods.

7.5 Specimen Storage and Other Use of Specimens

Specimens will be stored for at least one year after the primary manuscript has been published.

Other use of specimens is defined as studies not covered by the protocol or the informed consent form for the main study (see Appendix II: Sample Informed Consent Form: Sample Informed Consent Form).

This research may relate to SARS-CoV-2, COVID-19, vaccines, antibodies, the immune system, and other diseases. This research is done only to the extent authorized in each study site's informed consent form, or as otherwise authorized under applicable law. Other research on specimens ("other use") will occur only after review and approval by the CoVPN, the IRB of the researcher requesting the specimens, and the sIRB, if required.

As part of consenting for the study, participants document their initial decision to allow or not allow their specimens to be used in other research, and they may change their decision at any time. The participant's initial decision about other use of their specimens, and any later change to that decision, are documented in the study database. The Network will only allow other research to be done on specimens from participants who allow such use.

CRSs must notify the leadership and operations center (LOC) if institutional or local governmental requirements pose a conflict with or impose restrictions on specimen storage or other use of specimens.

7.6 Biohazard Containment

The transmission of blood-borne pathogens can occur through contact with contaminated needles, blood, and blood products, and the transmission of SARS-CoV-2 and other respiratory pathogens may occur through contact with contaminated respiratory droplets and aerosols. Appropriate precautions will be employed by all personnel in the collection, shipping and handling of all specimens for this study, as currently recommended by the CDC and the NIH or other applicable agencies.

All dangerous goods materials, including Biological Substances, Category A or Category B, must be transported according to instructions detailed in the International Air Transport Association Dangerous Goods Regulations.

8.0 HUMAN SUBJECTS CONSIDERATIONS

The CoVPN Prevalence Study will rely on the existing DAIDS guidelines regarding human subjects considerations to maintain compliance with the expectation of NIAID sponsored clinical research studies.

8.1 Ethical Review

This protocol and the template ICF(s) contained in Appendix II: Sample Informed Consent Form: Sample Informed Consent Form, and Appendix III: Sample Verbal Pre-Screening Script, will be reviewed and approved by the NIAID Prevention Science Review Committee (PSRC) with respect to scientific content and compliance with applicable research and human subjects' regulations.

The protocol, site-specific ICFs, participant education and recruitment materials, other requested documents, and any subsequent modifications will be reviewed and approved by an sIRB.

Subsequent to initial review and approval, the responsible sIRB will review the protocol at least annually. Safety and progress reports will be made to the sIRB, as required, at least annually, and within three months of study termination or completion. These reports will include the total number of participants enrolled in the study, the number of participants who completed the study, all changes in the research activity, and must comply with the requirements of 45 CFR 46.108(a)(4) and 21 CFR 56.108b for promptly reporting the following: all unanticipated problems involving risks to human subjects or others; serious or continuing noncompliance with applicable regulations or the requirements or determinations of their IRBs/ECs; and any suspension of termination of IRB approval. Documentation of continuing review will be submitted to the DAIDS PRO, in accordance with the current DAIDS Protocol Registration Policy and Procedure Manual.

8.2 Informed Consent

Informed consent will be obtained from each study participant using encrypted electronic tablets. Paper copies will be offered to participants who choose to take a copy with them. Each study site is responsible for developing informed consent language for local use, based on the templates in Appendix II: Sample Informed Consent Form: Sample Informed Consent Form, which describes the purpose of the study, the procedures to be followed, and the risks and benefits of participation, in accordance with all applicable regulations. If applicable, the study site also is responsible for translating the template form into local languages and verifying the accuracy of the translation by performing an independent back-translation.

Literate participants will document their provision of informed consent by signing their ICF. Non-literate participants will be asked to document their informed consent by marking their ICFs (e.g., with an X, thumbprint, or other mark) in the presence of a literate third-party witness. (Further details regarding DAIDS requirements for documenting the informed consent process with both literate and non-literate participants are provided in the DAIDS Standard Operating Procedure for Source Documentation.) Any other IRB requirements and site SOPs for obtaining informed consent from non-literate persons also will be followed.

For potential participants who are not of legal age, the parent or guardian will provide permission and the minor (7-17 years old) will provide assent.

For individuals with diminished cognitive capacity, study staff will explain the nature of the study, including the risks and benefits, to the participant's legally authorized representative (LAR), and to the extent possible to the participant, and answer all questions regarding the study. The LAR and the participant will be informed that their participation is voluntary. The LAR will complete an electronic informed consent that meets all applicable local and regulatory requirements. Due to strict COVID-19 prevention measures in senior living and healthcare facilities, alternative methods of obtaining consent from LARs (for example, by phone) will be allowed if approved by the IRB. Study staff will document the consent process in the participants' files for all enrolled participants.

The study staff member obtaining the informed consent and, if applicable, the individual designated to witness a verbal consent, must also sign the ICF. The participant or LAR must complete a comprehension assessment prior to signing the consent form.

8.3 Risks

Nasal swabs may cause minor nasal irritation and sneezing and rarely results in a nosebleed.

Venipuncture is sometimes associated with discomfort, dizziness, and rarely, an infection at the site of phlebotomy. Participants may become embarrassed, worried, or anxious when completing the survey. They may also become worried or anxious while waiting for their test results. Study staff will be trained to help participants deal with these feelings and provide them with resources

Participants who learn that they have SARS-CoV-2 infection, may experience anxiety related to their test results.

All study staff will be provided with personal protective equipment and will be required to have received training in Good Clinical Practices and Human Subject Protection according to DAIDS policies and procedures. Although study sites will make every effort to protect participant privacy and confidentiality, it is possible that participants' involvement in the study could become known to others, and that social harms may result because of presumed or confirmed SARS-CoV2 infection.

8.4 Benefits

Participants will receive SARS-CoV-2 RNA test results.

There may be no direct benefits to participants in this study, however, participants and others may benefit in the future from information learned from this study.

8.5 Compensation

Pending IRB approval, participants will be compensated for their time and effort in this study. Site-specific reimbursement amounts will be specified in the study ICFs.

8.6 Confidentiality

All study-related information will be stored securely at the study site. All participant information will be stored in locked file cabinets in areas with access limited to study staff. All laboratory specimens, reports, study data collection, process, and administrative forms will be identified by a coded number only to maintain participant confidentiality. All local databases will be secured with password-protected access systems. Forms, lists, logbooks, appointment books, and any other listings that link participant ID numbers to other identifying information will be stored in a separate, locked file in an area with limited access.

Participant's study information will not be released without the written permission of the participant, except as necessary for monitoring by NIAID and/or its contractors; representatives of the study's LOC, SDMC, and/or LC, and the sIRB.

NIAID has Certificates of Confidentiality from the US Department of Health and Human Services that is applicable to this study. Certificates cover all study sites conducting this research, regardless of the country where the investigator or the protected information resides. This Certificate protects study staff from being compelled to disclose study-related information held in the US, by any Federal, State or local civil, criminal, administrative, legislative, or other body.

8.7 Communicable Disease Reporting Requirements

Study staff will comply with all applicable local requirements to report communicable diseases (including SARS-CoV-2 infections, where required) identified among study participants to local health authorities. Participants will be made aware of all reporting requirements during the study informed consent process.

8.8 Study Discontinuation

The study may also be discontinued at any time by NIAID, the CoVPN, the sIRB or other government or regulatory authorities.

9.0 ADMINISTRATIVE PROCEDURES

The CoVPN Prevalence Study will rely on the existing DAIDS structures to execute administrative procedures that are in compliance with the expectation of NIAID sponsored clinical research studies.

9.1 Protocol Registration

Initial Registration of the protocol by the DAIDS PRO is required prior to the implementation of this protocol. As part of this process, each site must have the protocol and protocol ICF(s) approved, as appropriate, by the sIRB. Upon receiving final approval, sites will submit all required protocol registration documents to the DAIDS PRO at the DAIDS Regulatory Support Center (RSC). The DAIDS PRO will review the submitted protocol registration packet to ensure that all of the required documents have been received. In the case of Initial Registration, site-specific ICFs WILL be reviewed and approved by the DAIDS PRO. Sites will receive an Initial Registration Notification from the DAIDS PRO that indicates successful completion of the protocol registration process. A copy of the Initial Registration Notification should be retained in the site's regulatory files.

Following Initial Registration, any full protocol amendments require submission of a protocol registration packet to the DAIDS PRO as described above; however, the DAIDS PRO WILL NOT review and approve site-specific ICFs. Sites will receive a Registration Notification when the DAIDS PRO receives a complete registration packet. Upon receiving final IRB/EC and any other applicable regulatory approval(s) for an amendment, sites should implement the amendment immediately.

For additional information on the protocol registration process and specific documents required for initial and amendment registrations, refer to the current version of the DAIDS Protocol Registration Manual online.

9.2 Study Activation

Pending successful protocol registration and submission of all required documents, the LOC staff will "activate" a site. Study implementation may not be initiated until a study activation notice is provided to the site by the LOC. In addition, if study activation is determined to be necessary for any subsequent amendments, study implementation may not be initiated until a study activation notice is provided to the site by the LOC.

9.3 Study Coordination

Study implementation will be directed by this protocol as well as the SSP Manual. The SSP Manual — which will contain links to the Requirements for Source Documentation in DAIDS Funded and/or Sponsored Clinical Trials, as well as the DAIDS Manual for Expedited Reporting of Adverse Events

to DAIDS and the DAIDS Table for Grading the Severity of Adult and Pediatric Adverse Events—will outline procedures for conducting study visits; data and forms processing; AE assessment, management and reporting; and other study operations.

Data collection instruments and other study-specific implementation materials will be developed by key members of the protocol team and SDMC. Data will be submitted to the SDMC for data cleaning, reporting and analysis. Data management and coding queries will be generated and applied to the data by SDMC staff on a routine basis for verification and resolution by site staff.

Close coordination between protocol team members will be necessary to track study progress, respond to queries about proper study implementation, and address other issues in a timely manner. Rates of accrual and visit completion rates will be monitored closely by the team as well as the independent study monitoring committee.

9.4 Study Monitoring

Study monitoring will be performed at the discretion of and in accordance with DAIDS policies. Study monitors will:

- Verify compliance with human subjects and other research regulations and guidelines;
- Assess adherence to the study protocol, SSP Manual, and local counseling practices; and
- Confirm the quality and accuracy of information collected at the study site and entered into the study database.
- Verify compliance with Good Clinical Laboratory Practices

Monitoring visits will be conducted on-site or remotely. Remote visits may include remote source document verification using methods specified for this purpose by NIAID. Remote monitoring visits may be performed in place of, or in addition to onsite visits to ensure the safety of study participants and data integrity (16). The site will make available study documents for site monitors to review utilizing a secure platform that is HIPAA and 21 CRF Part 11 compliant. Potential platform options include: Veeva SiteVault, site-controlled SharePoint or cloud-based portal, direct access to Electronic Medical Record (EMR), and Medidata Rave Imaging Solution. Other secure platforms that are 21 CFR Part 11 compliant may be utilized, as allowed by the DAIDS Office of Clinical Site Oversight (OCSO). For on-site visits site investigators will allow study monitors to inspect study facilities and documentation (e.g., ICFs, clinic and laboratory records, other source documents, paper or electronic CRFs), as well as observe the performance of study procedures. Investigators also will allow inspection of all study-related documentation by authorized representatives of the study's LOC, SDMC, and LC, as well as NIAID, the sIRB and US regulatory authorities (Office for Human Research Protections (OHRP) or other regulatory agencies). A site visit log will be maintained at each study site to document all visits.

9.5 Protocol Compliance

The study will be conducted in full compliance with the protocol. The protocol will not be amended without prior written approval by the Protocol Chairs and sponsor. All protocol amendments must be submitted to the DAIDS RSC and approved by the relevant IRB(s) prior to implementing the amendment.

9.6 Investigator's Records

The IoR will maintain, and store in a secure manner, complete, accurate, and current study records throughout the study. The IoR will retain all study records for at least three years after the completion of research.

Completion of a clinical research study occurs when the following activities have been completed:

- All research-related interventions or interactions with human subjects (e.g., when all subjects are off study);
- All protocol-required data collection of identifiable private information described in the IRB-approved research plan;
- All analysis of identifiable private information described in the IRB-approved research plan;
- Primary analysis of either identifiable private or de-identified information.

Study records include administrative documentation — including protocol registration documents and all reports and correspondence relating to the study — as well as documentation related to each participant screened and/or enrolled in the study — including ICFs, locator forms, eCRFs, notations of all contacts with the participant, and all other source documents.

9.7 Use of Information and Publications

Publications, presentations or dissemination of results should be reviewed by a CoVPN publications committee and NIAID prior to submission or release of any results.

9.8 ClinicalTrials.gov

This study is subject to the NIH Policy on the Dissemination of NIH-Funded Clinical Trial Information. A description of this clinical trial will be available on www.ClinicalTrials.gov.

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APPENDIX I: SCHEDULE OF EVALUATIONS AND PROCEDURES

	Pre-screening	Screening	Enrollment
Administrative and Behavioral Evaluations/Procedures			
Eligibility pre-screening	X		
Screening and Enrollment informed consent		Х	
Demographic and clinical information			Χ
Questionnaire administration			Χ
COVID-19 risk reduction counseling			Χ
Clinical Evaluations/Procedures			
POC COVID-19 testing with return of results (if available)			Χ
Collection of nasal mid-turbinate swab*			Χ
Blood collection			Χ
Saliva collection (subset of participants)			Χ
Laboratory Evaluations/Procedures			
Local testing:			
SARS-CoV-2 RNA testing (nasal mid-turbinate swab)			Χ
Serum storage for SARS-CoV-2 antibody testing and characterization of the serologic response to SARS-CoV-2 infection; and other testing (see Section 7.4)			Х
Dried blood spot storage for SARS-CoV-2 antibody testing and characterization of the serologic response to SARS-CoV-2 infection; and other testing, when tests are validated (see Section 7.4) **			Х
Nasal swab mid-turbinate storage* for the saliva substudy			Χ
Saliva sample storage (subset of participants)			Χ

^{*}A duplicate set of nasal swab samples is needed for storage in the Saliva substudy in a subset of participants who are selected at two sites.

^{**}DBS storage for participants 2 months to 2 years or >2 years that had unsuccessful venous puncture attempts prepared from capillary sample.

APPENDIX II: SAMPLE INFORMED CONSENT FORM

CoVPN 5002

SARS-COV-2 PREVALENCE STUDY

Version 2.0 26 May 2021 DAIDS-ES ID: 38749

Sponsored by: United States (US) National Institute of Allergy and Infectious Diseases (NIAID), US National Institutes of Health (NIH)

Site:

Principal Investigator:

Phone:

NOTE TO SITES: This sample consent form must be modified into three separate consent forms: (1) adults enrolling with no diminished cognitive capacity, that are able to consent on their own (2) minors, ages 7-17, enrolling from community venues, with consent of their guardian and their assent (signed on this form for ages 14-17; signed on a separate, simplified assent form for ages 7-13, Appendix III) and (3) individuals with diminished cognitive capacity, with consent given by their legally authorized representative. Guidance is provided below, as needed.

Consent form for minors, add: If you are a parent or legal guardian of a child participating on this study, throughout this document "you(r)" = "your child".

Consent form for adults with diminished cognitive capacity, add: If you are the legally authorized representative of an individual participating in this study, throughout this document "you(r)" = "the participant".

Thank you for your interest in our research study. Please read this consent form or ask someone to read it to you. If you decide to join the study, we will ask you to sign or make your mark on this form. We will offer you a copy to keep. We will ask you questions to see if we have explained everything clearly. You can also ask us questions about the study.

Research is not the same as treatment or medical care. The purpose of a research study is to answer scientific questions.

1. Summary Information

Here is a summary of important information about the study:

The purpose of the study is to estimate the number of people who have or have had the SARS-CoV-2 virus in different communities in the United States. Some people know this virus by the name "coronavirus." It can cause the disease called COVID-19. There is no drug given in this study for prevention or treatment.

If you choose to join, you will have one study visit either right after signing this consent form or at a later date at the clinic. If you are available now, the visit procedures will take place right here. You will complete a questionnaire, provide a blood sample and have a nasal swab collected. Some participants may be asked to also provide a saliva sample and additional nasal swab. [Only include saliva if your site is participating in this subset. Otherwise, delete.] [For participants recruited from health facilities, also include: We will also collect some

information from your health records to document chronic diseases, smoking history, and history of SARS-CoV-2 diagnosis.]

Some general risks include discomfort when your blood is drawn. Nasal swabs may cause minor irritation to your nose, and sneezing and rarely, may cause a nosebleed. You may also feel worried or anxious while waiting for your SARS-CoV-2 test results.

There may be no direct benefit to you for taking part in this study, but the information learned from this study may help researchers develop new ways to prevent and/or treat SARS-CoV-2 infection. We will provide you with free SARS-CoV-2 testing and direct you to resources for help if you are feeling sick or need information on how to avoid passing the virus on to others.

Whether to take part in this study is your choice. You do not have to take part in the study and you are free to stop at any time.

The rest of this form provides a more complete description of this study. Please read it carefully.

ABOUT THE STUDY

The COVID-19 Prevention Network (CoVPN) is doing a study to estimate the number of people who have or have had the SARS-CoV-2 virus in different communities in the United States. This study is being done to help determine the best places to perform future research studies that will test new drugs for treatment or prevention of COVID-19.

Between 78,000 – 98,000 people will take part in this study at multiple places around the country. In each community, ~3920 will be enrolled. The researcher in charge of this study in your community is [Insert name of site PI] and s/he is located at [Insert CRS name]. The [sponsor] is paying for the study.

2. We are doing this study to answer several questions.

- How many people in the study communities have or have had SARS-CoV-2 or COVID-19?
- What do people in the study communities know about SARS-CoV-2 or COVID-19?
- How do people in the study communities feel about SARS-CoV-2 or COVID-19?
- How often and in what ways are people exposed to SARS-CoV-2?
- What is the general health of people in the study communities?

3. There is no drug or treatment provided as part of this study.

This is an observational study. We are only testing participants for SARS-CoV-2, drawing blood for additional lab testing related to SARS-CoV-2, and asking participants to complete a questionnaire.

JOINING THE STUDY

4. It is completely up to you whether or not you join the study.

Take your time in deciding. If it helps, talk to people you trust such as a friends or family member. If you decide not to join this study, or if you discontinue before you complete the study procedures, you will not lose any benefits or rights you would normally have at [CRS name].

5. If you want to join the study, we will screen you to see if you are eligible.

Screening involves a brief questionnaire to determine:

- Your age
- Where you live
- If you are enrolled in another SARS-CoV-2 or COVID-19 clinical trial which involves taking an experimental medication
- If you are already enrolled in this study in another community

BEING IN THE STUDY

If you meet the study requirements and want to join, here is what will happen:

6. You will have one study visit either immediately after signing the consent form or at a later date that is more convenient for you.

This study includes a single study visit. It will take approximately 30 minutes to complete the study visit. (If all procedures cannot be completed in one visit, sample collection and the brief survey must be completed during the same visit within 10 days of completing this consent). The study procedures will include:

- Collecting basic information about you, your health, your household, and possible exposure to SARS-CoV-2 (completed by parents of participants 0-9 years old)
- Completing a brief survey about your knowledge and feelings about SARS-CoV-2 (completed by parents of participants 0-9 years old)
- Drawing blood for lab testing related to SARS-CoV-2
 - o ~10 mL if you are > 6 years old or 1 ml from a fingerstick after having had unsuccessful venous puncture attempts
 - \circ ~6 mL if you are 2 6 years old
 - o ~500 uL in a microtainer tube if you are 2 months to < 2 years old
 - A heel stick is recommended for participants 2-6 months and finger stick for participants 6 months to 2 years old
- Performing nasal swab testing for SARS-CoV-2
- Some participants may be asked to provide saliva and an additional nasal swab for SARS-CoV-2 testing. [Only include if your site is participating in this subset. Otherwise, delete.]
- [For participants recruited from health facilities, also include: We will also collect some information from your health records related to chronic conditions, smoking history, and prior SARS-CoV-2 diagnosis.]

7. You will receive a gift card for [\$X] when you complete the study visit.

This amount is to compensate you for your time. You do not have to pay anything to be in this study.

8. We will test your samples to see if you have or have had SARS-CoV-2

We will test your samples for SARS-CoV-2 RNA. This will tell us if you have the SARS-CoV-2 virus in your body. You will be given a [phone number or website] to retrieve the results of these tests. We will also test for antibodies against SARS-CoV-2. Antibodies are the proteins your body makes to fight infections. Antibody tests will tell us if you have SARS-CoV-2 now or if you had it in the past. These tests are only for research purposes. Results from these tests will not be returned to you.

Your samples may also be used to help characterize SARS-CoV-2 viruses and the body's response to SARS-CoV-2 infection. They may also be used to study how the virus spreads in the community, and to study other infections that may have an effect on COVID-19. These tests are only for research purposes. Results from these tests will not be returned to you.

Testing will not include sequencing your full DNA.

9. When samples are no longer needed for this study, the CoVPN may want to use them in other studies and share them with other researchers.

These samples are called "extra samples". The CoVPN will only allow your extra samples to be used in other studies if you agree to this. You will mark your decision at the end of this form. If you have any questions, please ask.

Do I have to agree? No. You are free to say yes or no, or to change your mind after you sign this form. At your request, we will destroy all extra samples that we have. Your decision will not affect your being in this study or have any negative consequences here.

Where are the samples stored? Extra samples are stored in a secure central place called a repository. Your samples will be stored in a repository in the United States.

How long will the samples be stored? There is no limit on how long your extra samples will be stored. [Site: Revise the previous sentence to insert limits if your regulatory authority imposes them.]

Will I be paid for the use of my samples? No. Also, a researcher may make a new scientific discovery or product based on the use of your samples. If this happens, there is no plan to share any money with you. The researcher is not likely to ever know who you are.

Will I benefit from allowing my samples to be used in other studies? Probably not. Results from these other studies are not given to you, this clinic, or your doctor. They are not part of your medical record. The studies are only being done for research purposes.

Will the CoVPN sell my samples and information? No, but the CoVPN may share your samples with other researchers. Once we share your samples and information, we may not be able to get them back.

How do other researchers get my samples and information? When a researcher wants to use your samples and information, their research plan must be approved by the CoVPN. Also, the institutional review board (IRB) will review this plan. IRBs protect the rights and well-being of people in research. If the research plan is approved, the CoVPN will send your samples to the researcher's location.

What information is shared with the CoVPN or other researchers? The samples and information will be labeled with a code number. The key to the code will stay at the CRS. It will not be shared with the CoVPN or other researchers. Your name will not be part of the information. However, some information that we share may be personal, such as your race, ethnicity, sex, health information from the study, and lab test results.

What kind of studies might be done with my extra samples and information? The studies will be related to SARS-CoV-2, COVID-19, vaccines, antibodies, the immune system (your body's defense system) and other diseases. Testing will not include sequencing your full DNA.

Who will have access to my information in studies using my extra samples? People who may see your information are:

- Researchers who use your extra samples and information for other research
- Government agencies that fund or monitor the research using your extra samples and information
- Any regulatory agency that reviews clinical trials
- An Institutional Review Board
- The people who work with the researcher

All of these people will do their best to protect your information. The results of any new studies that use your extra samples and information may be published. No publication will use your name or identify you personally.

10. We will do our best to protect your private information.

[Sites should verify there are no HIPAA conflicts with this section.]

Your study records and samples will be kept in a secure location. We will label all of your samples and most of your records with a code number, not your name or other personal information. However, it is possible to identify you, if necessary. We will not share your name with the lab that does the tests on your samples, or with anyone else who does not need to know your name.

Clinic staff will have access to your study records. Your records may also be reviewed by groups who watch over this study to see that we are protecting your rights, keeping you safe, and following the study plan. These groups include:

- The US National Institutes of Health and its study monitors,
- Any regulatory agency that reviews clinical trials,
- [Insert name of sIRB],
- [Insert name of local and/or national regulatory authority as appropriate],
- The CoVPN and people who work for them,
- The US Office for Human Research Protections.

All reviewers will take steps to keep your records private.

We cannot guarantee absolute privacy. If you are found to have SARS-CoV-2 or another medical condition that we are required to report by law, then some of your information may be shared. At this clinic, we have to report the following information:

[Site: Include any public health or legal reporting requirements. Bulleted examples should include all appropriate cases (reportable communicable disease, risk of harm to self or others, etc.). If your site does not have public health or legal reporting requirements, you may delete the last sentence in the paragraph above, along with the bullets below.]

- [Item 1]
- [Item 2]
- [Item 3]

We have a Certificate of Confidentiality from the US government, to help protect your privacy. With the certificate, we do not have to release information about you to someone who is not connected to the study, such as the courts or police. Sometimes we can't use the certificate. Since the US government funds this research, we cannot withhold information from it. Also, you can still release information about yourself and your study participation to others.

The results of this study may be published. No publication will use your name or identify you personally. We may share information from the study with other researchers. We will not share your name or information that can identify you.

A description of this clinical trial will be available on http://www.ClinicalTrials.gov. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

11. If you are infected with SARS-CoV-2.

We will direct you to resources you can access if you are feeling sick and information on how to avoid passing SARS-CoV-2 to others.

OTHER RISKS

12. There are other risks to being in this study.

Risks of giving blood:

Taking blood samples may cause some pain, bruise your arm, or make you feel lightheaded. In rare cases you may faint. There is also a slight chance of infection when blood is drawn.

SARS-CoV-2 testing

Nasal swabs may cause minor irritation to your nose, and sneezing and rarely, may cause a nosebleed.

You may be nervous while you are waiting for your SARS-COV-2 test result.

Completing the questionnaire

You may become embarrassed, worried, or anxious when completing the survey.

Risk of exposure to SARS-CoV-2 from other people:

Participating in this research study may increase your risk of exposure to SARS-CoV-2 from other people. However, your research site will do everything they can to make this risk as small as possible by [include details of how staff will protect participants from exposure].

Risks of disclosure of your personal information:

We will take several steps to protect your personal information. Although the risk is very low, it is possible that your personal information could be given to someone who should not have it. If that happened, you could face discrimination, stress, and embarrassment. We can tell you more about how we will protect your personal information if you would like it.

BENEFITS

13. The study may not benefit you.

There may be no direct benefits to participating in this study. However, being in the study might still help you in some ways. You will receive the results of your SARS-COV-2 RNA testing. The counseling that you get as part of the study may help you avoid getting SARS-CoV-2 or help you avoid passing it to others if you do have it or get it.

This study may also help in the search for ways to prevent or treat COVID-19.

LEAVING THE STUDY

14. Tell us if you no longer want to be included in the study.

There will only be one study visit that will take place today. You are free to end the visit or withdraw your consent at any time and for any reason. Your care at [CRS name] and your legal rights will not be affected.

If you choose to leave the study at a later date, the researchers may keep and analyze the data already collected, as long as it relates to the study described in this consent form.

15. You may be removed from the study

You may be withdrawn from the study in order to protect their safety and/or if you are unwilling or unable to comply with required study procedures.

INJURIES

16. If you get sick or injured because of the study, contact us immediately.

It is unlikely that you will be injured as a result of study participation. If you are injured, the *[CRS name]* staff will give you immediate necessary treatment for your injuries. You [will/will not] have to pay for this treatment. You will be told where you can get additional treatment for your injuries. [*Must include the following*:] There is no program to pay money or give other forms of compensation for such injuries either through this institution or the US NIH. You do not give up any legal rights by signing this consent form.

QUESTIONS

17. Contact us at any time if you have questions or problems.

If you have questions about this study, contact [contact information]

If you have any symptoms that you think may be related to this study, contact [contact information]

If you have questions about your rights as a research participant, you should contact [insert name or title of person on the IRB or other organization appropriate for the site] at [contact information].

If you want to be excluded from the study after you've completed your study visit, contact [contact information].

YOUR PERMISSIONS AND SIGNATURE

[NOTE TO SITES: Delete this section if using a separate consent for use of samples and information in other studies]

1.	Permission	to	use	extra	samp	les.
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In Section 9 of this form, we told you about possible other uses of your extra samples and information, outside this study. Please choose only one of the options below and write your initials or make your mark in the box next to it. Whatever you choose, the CoVPN will keep track of your decision about how your samples and information can be used. You can change your mind after signing this form.
I allow my extra samples and information to be used for other studies related to SARS-CoV-2 prevention, the immune system, and other diseases.
OR
I do not allow my extra samples to be used in any other studies.
2. What does your signature on this consent form mean?
• You understand the information given to you in this consent form.
• You accept the provisions in the form [or, on behalf of the participant].
 You have had your questions answered and know that you can ask more.
• You agree to participate [or permit the participant to join the study].
You will not give up any of your [or the participant's] legal rights by signing this consent form. CONSENT TO TAKE PART IN THIS STUDY
In consideration of all the above, I give my consent [for my child/the participant] to participate in this research study.
Note to site: Next 3 lines are only for legally authorized representatives, parents, or guardians, giving consent for someone with cognitive incapacity or for a minor.
LEGALLY AUTHORIZED REPRESENTATIVE (LAR)/PARENT/GUARDIAN INFORMED CONSENT

LAR/parent/guardian signature

LAR/parent/guardian name (print)

Relationship to participant:

Time

Date

Participant's name (print)	Participant's signature or mark	Date	Time
Staff conducting consent discussion (print)	Staff signature	Date	Time
For participants who are unable t	o read or write, a witness should complete	the signature bl	ock below:
Witness's name* (print)	Witness's signature	Date	

^{*}Witness is impartial and was present for the entire discussion of this consent form.

APPENDIX III: SAMPLE ASSENT FORM

CoVPN 5002

SARS-COV-2 PREVALENCE STUDY

Version 2.0 26 May 2021 DAIDS-ES ID: 38749

Sponsored by: United States (US) National Institute of Allergy and Infectious Diseases (NIAID), US National Institutes of Health (NIH)

Site:

Principal Investigator:

Phone:

Population: Minors, ages 7- 13 years, enrolling from community venues

WHAT IS A RESEARCH STUDY?

Research studies help us learn new things. First, we ask a question. Then we try to find the answer.

This paper talks about our research and the choice that you have to take part in it. We want you to ask us any questions that you have. You can ask questions any time.

IMPORTANT THINGS TO KNOW...

- You get to decide if you want to take part
- You can say 'No' or you can say 'Yes'
- No one will be upset if you say 'No'
- If you say 'Yes', you can always say 'No' later
- You can say 'No' at any time

WHY ARE WE DOING THIS RESEARCH?

We are doing this research to find out how many people in your community have or have had the SARS-CoV-2 coronavirus or COVID-19.

WHAT WOULD HAPPEN IF I JOIN THIS RESEARCH?

If you decide to be in the research, we would ask you to do the following:

- Questionnaire: We would ask you some questions and mark your answers on our tablet. Your parent or guardian can help you answer those questions.
- Blood draws: We would collect a small amount of blood, about 2 teaspoons, with a needle.
- Nasal Swab): We will use a swab to collect some fluid from your nose.
 - Saliva collection: You may be asked to provide some saliva. and an additional nasal swab. [Only include if your site is participating in this subset. Otherwise, delete.]

COULD BAD THINGS HAPPEN IF I JOIN THIS RESEARCH?

Drawing blood may cause some pain, bruise your arm, or make you a little dizzy. In rare cases you may faint. There is also a slight chance of infection after blood is drawn.

Nasal swabs may cause minor irritation to your nose, and sneezing and rarely, may cause a nosebleed.

You may be nervous while you are waiting for your SARS-COV-2 test result.

You may become embarrassed, worried, or nervous when completing the questionnaire.

You may come into contact with someone with SARS-CoV-2 but we will do everything we can to protect you like [include details of how staff will protect participants from exposure].

We will do everything we can to protect your privacy but there is a small chance that your information could be given to someone who should not have it. If that happened, you could face discrimination, stress, and embarrassment. We can tell you more about how your information will be protected, if you wish.

COULD THE RESEARCH HELP ME?

There may be no direct benefits to participating in this study. However, being in the study might still help you in some ways. You will receive the results of your SARS-COV-2 RNA testing. The counseling that you get as part of the study may help you avoid getting SARS-CoV-2 or help you avoid passing it to others if you do have it or get it.

This study may also help in the search for ways to prevent or treat COVID-19.

WHAT ELSE SHOULD I KNOW ABOUT THIS RESEARCH?

If you don't want to be in the study, you don't have to be.

It is also OK to say yes and change your mind later. You can stop being in the study at any time. If you want to stop, please tell us.

To thank you for being in the study, we would give you [\$XX]. We will hand this money to your parent/guardian to hold for you.

You can ask us questions any time.

IS THERE ANYTHING ELSE?

If you want to be in the study after we talk, please write your name below. We will write our name too. This shows we talked about the research and that you want to take part.

Printed Name of Participant _	
(To be written by child/adoleso	cent)

Signature of Participant (N/A for children who do not have a sig	nature)
Printed Name of Researcher	
Signature of Researcher	
Date	Time

APPENDIX IV: SAMPLE VERBAL PRE-SCREENING SCRIPT

CoVPN 5002

SARS-COV-2 PREVALENCE STUDY

Version 2.0

26 May 2021 DAIDS-ES ID: 38749

Sponsored by: United States (US) National Institute of Allergy and Infectious Diseases (NIAID), US National Institutes of Health (NIH)

Site:

Principal Investigator:

Phone:

NOTE TO SITE: This script should be adapted to accommodate younger participants.

Interviewer Script:

Hi, my name is [interviewer's name] and I work at [name of institution]. We are conducting a research study in this community and XX other communities in the United States to estimate the number of people who have or have had the SARS-COV-2 virus. Some people know this virus by the name "coronavirus." It can cause the disease called COVID-19. It can cause a disease called COVID-19. Please note: You are a volunteer and can decide not to take part or can quit at any time.

Participant Information Sheet (to be summarized verbally or offered on paper to all people who screen)

Site [insert name and address]

Principal Investigator: [insert name]

Phone: [insert number]

Purpose: The purpose of this study is to estimate the number of people who have or have had SARS-COV-2 virus in different communities in the United States.

Commitment: If you choose to join, you will have one study visit either right after signing this consent form or at a later date at the clinic. If you are available now, the visit procedures will take place right here. You will complete a questionnaire, provide a blood sample and have a nasal swab collected. Some participants may be asked to also provide a saliva samples and additional nasal swab. [Only include saliva if your site is participating in this subset. Otherwise, delete.] [For participants recruited from health facilities, also include: We will also collect some information from your health records to document chronic diseases, smoking history, and history of SARS-CoV-2 diagnosis.]

Benefits: There may be no direct benefit to you for taking part in this study, but the information learned from this study may help researchers develop new ways to prevent and/or treat SARS-CoV-2 infection. We will provide

you with free SARS-CoV-2 testing and direct you to resources for help if you are feeling sick or need information on how to avoid passing the virus on to others.

For more information contact: [insert name and number]

The study will take place at: [insert site address]

APPENDIX V: SUMMARY OF CURRENT SARS-COV-2 SURVEILLANCE STUDIES

Study Title and Identifier	Study Description and Objective	Study Design	Location
Surveillance of Individuals Following SARS-CoV-2 Exposure (NCT04383444)	To better understand how long it takes an adult person to develop (or not develop) an infection with the SARS-CoV-2 virus after they have had contact with a person who has a confirmed infection.	Prospective longitudinal cohort study with 21-day follow-up	Bethesda, MD
COVID-19: Human Epidemiology and Response to SARS-CoV-2 (HEROS) (NCT04375761)	To: 1) determine the prevalence of SARS-CoV-2 carrier status over time in children and parents; 2) determine prevalence of antibody development over time in children and parents; 3) compare carrier status and antibody development for children with asthma and/or other atopic conditions versus children without asthma and/or other atopic conditions; and 4) Investigate the presence of SARS-CoV-2 exposure in historical samples from enrolled participants.	Active surveillance study with 6-month follow-up of children and their parents previously enrolled in a cohort study	Aurora, CO Washington, D.C. Boston, MA Detroit, MI Saint Louis, MO New York, New York Cincinnati, OH Nashville, TN Dallas, TX Madison, WI
Registry to Study Factors that may Impact COVID-19 Occurrence and Severity (NCT04368065)	To better understand risk factors, symptoms, and treatments for COVID-19 illness in adults with potential exposure.	Observation, direct-to-participant, web-based, longitudinal study with 3-month follow-up of adults	Outreach will target regions with high known prevalence of COVID- 19 infection; however registration is open to all
Seroprevalence of SARS-CoV-2 Antibodies in Previously Undiagnosed Healthcare Workers (NCT04383587)	To identify healthcare workers with SARS-CoV-2 antibodies who have not been previously diagnosed and are presumed COVID-19 negative, then determine the level of immunity in this population which could inform further decisions about widespread antibody testing in a healthcare worker population.	Cross-sectional	Mayo Clinic in Jacksonville, FL
Longitudinal COVID-19 Cohort Study (NCT04393155)	To assess whether survivors from severe COVID-19 experience persistent functional impairments and to investigate the biologic mechanisms underlying these functional impairments.	Longitudinal study with 1-year of follow-up of hospitalized COVID-19 patients	University of Vermont and Johns Hopkins University

Study Title and Identifier	Study Description and Objective	Study Design	Location
SARS-CoV-2 Pandemic Serosurvey and Blood Sampling (NCT04334954)	To find the number of people with detectable antibodies to SARS-CoV-2 from a sampling of adults who have no known exposure or clinical illness.	Cross-sectional	University of Alabama, National Institutes of Health Clinical Center, University of Pittsburgh